National Endowment for the Arts

To Read or Not To Read

A Question of National Consequence

Executive Summary

"Read in order to live."

—GUSTAVE FLAUBERT

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Executive Summary
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Preface

Photo by Vance Jacobs

To Read or Not To Read gathers and collates the best national data available to provide a reliable and comprehensive overview of American reading today. While it incorporates some statistics from the National Endowment for the Arts' 2004 report, *Reading at Risk,* this new study contains vastly more data from numerous sources. Although most of this information is publicly available, it has never been assembled and analyzed as a whole. To our knowledge, *To Read or Not To Read* is the most complete and up-to-date report of the nation's reading trends and—perhaps most important—their considerable consequences.

To Read or Not To Read relies on the most accurate data available, which consists of large, national studies conducted on a regular basis by U.S. federal agencies, supplemented by academic, foundation, and business surveys. Reliable national statistical research is expensive and time-consuming to conduct, especially when it requires accurate measurements of various subgroups (age or education level, for example) within the overall population. Likewise, such research demands formidable resources and a commitment from an organization to collect the data consistently over many years, which is the only valid way to measure both short and long-term trends. Few organizations outside the federal government can manage such a painstaking task. By comparison, most private-sector or media surveys involve quick and isolated polls conducted with a minimal sample size.

When one assembles data from disparate sources, the results often present contradictions. This is not the case with *To Read or Not To Read.* Here the results are startling in their consistency. All of the data combine to tell the same story about American reading.

The story the data tell is simple, consistent, and alarming. Although there has been measurable progress in recent years in reading ability at the elementary school level, all progress appears to halt as children enter their teenage years. There is a general decline in reading among teenage and adult Americans. Most alarming, both reading ability and the habit of regular reading have greatly declined among college graduates. These negative trends have more than literary importance: As this report makes clear, the declines have demonstrable social, economic, cultural, and civic implications.

How does one summarize this disturbing story? As Americans, especially younger Americans, read less, they read less well. Because they read less well, they have lower levels of academic achievement. (The shameful fact that nearly one-third of American teenagers drop out of school is deeply connected to declining literacy and reading comprehension.) With lower levels of reading and writing ability, people do less well in the job market. Poor reading skills correlate heavily with lack of employment, lower wages, and fewer opportunities for advancement. Significantly worse reading skills are found among prisoners than in the general adult population. And deficient readers are less likely to become active in civic and cultural life, most notably in volunteerism and voting.

Strictly understood, the data in this report do not necessarily show cause and effect. The statistics merely indicate correlations. The habit of daily reading, for instance, overwhelmingly correlates with better reading skills and higher academic

achievement. On the other hand, poor reading skills correlate with lower levels of financial and job success. At the risk of being criticized by social scientists, I suggest that since all the data demonstrate consistent and mostly linear relationships between reading and these positive results—and between poor reading and negative results—reading has played a decisive factor. Whether or not people read, and indeed how much and how often they read, affects their lives in crucial ways.

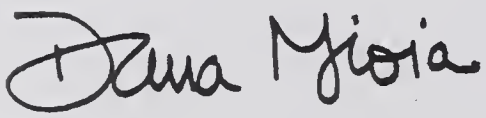
All of the data suggest how powerfully reading transforms the lives of individuals—whatever their social circumstances. Regular reading not only boosts the likelihood of an individual's academic and economic success—facts that are not especially surprising—but it also seems to awaken a person's social and civic sense. Reading correlates with almost every measurement of positive personal and social behavior surveyed. It is reassuring, though hardly amazing, that readers attend more concerts and theater than non-readers, but it is surprising that they exercise more and play more sports—no matter what their educational level. The cold statistics confirm something that most readers know but have mostly been reluctant to declare as fact—books change lives for the better.

Some people will inevitably criticize *To Read or Not To Read* as a negative report—understating the good works of schools, colleges, libraries, and publishers. Certainly, the trends reported here are negative. There is, alas, no factual case to support general growth in reading or reading comprehension in America. But there is another way of viewing this data that is hardly negative about reading.

To Read or Not To Read confirms—without any serious qualification—the central importance of reading for a prosperous, free society. The data here demonstrate that reading is an irreplaceable activity in developing productive and active adults as well as healthy communities. Whatever the benefits of newer electronic media, they provide no measurable substitute for the intellectual and personal development initiated and sustained by frequent reading.

To Read or Not To Read is not an elegy for the bygone days of print culture, but instead is a call to action—not only for parents, teachers, librarians, writers, and publishers, but also for politicians, business leaders, economists, and social activists. The general decline in reading is not merely a cultural issue, though it has enormous consequences for literature and the other arts. It is a serious national problem. If, at the current pace, America continues to lose the habit of regular reading, the nation will suffer substantial economic, social, and civic setbacks.

As with *Reading at Risk,* we issue this report not to dictate any specific remedial policies, but to initiate a serious discussion. It is no longer reasonable to debate whether the problem exists. It is now time to become more committed to solving it or face the consequences. The nation needs to focus more attention and resources on an activity both fundamental and irreplaceable for democracy.



Dana Gioia
Chairman, National Endowment for the Arts

Executive Summary

In 2004, the National Endowment for the Arts published *Reading at Risk: A Survey of Literary Reading in America.* This detailed study showed that Americans in almost every demographic group were reading fiction, poetry, and drama—and books in general—at significantly lower rates than 10 or 20 years earlier. The declines were steepest among young adults.

More recent findings attest to the diminished role of voluntary reading in American life. These new statistics come from a variety of reliable sources, including large, nationally representative studies conducted by other federal agencies. Brought together here for the first time, the data prompt three unsettling conclusions:

- **Americans are spending less time reading.**
- **Reading comprehension skills are eroding.**
- **These declines have serious civic, social, cultural, and economic implications.**

A. Americans Are Reading Less

Teens and young adults read less often and for shorter amounts of time when compared with other age groups and with Americans of the past.

1. Young adults are reading fewer books in general.

- Nearly half of all Americans ages 18 to 24 read no books for pleasure.
- The percentage of 18- to 44-year-olds who read a book fell 7 points from 1992 to 2002.

Percentage of Young Americans Who Read a Book Not Required for Work or School

Age group	1992	2002	Change	Rate of decline
18–24	59%	52%	-7 pp	-12%
25–34	64%	59%	-5 pp	-8%
35–44	66%	59%	-7 pp	-11%
All adults (18 and over)	61%	57%	-4 pp	-7%

pp = percentage points

Source: National Endowment for the Arts

2. Reading is declining as an activity among teenagers.

- Less than one-third of 13-year-olds are daily readers.
- The percentage of 17-year-olds who read nothing at all for pleasure has doubled over a 20-year period. Yet the amount they read for school or homework (15 or fewer pages daily for 62% of students) has stayed the same.

Percentage of Students Reading for Fun

	Age 13			Age 17		
Reading frequency	1984	2004	Change	1984	2004	Change
Never or hardly ever read	8%	13%	+5 pp	9%	19%	+10 pp
Read almost every day	35%	30%	-5 pp	31%	22%	-9 pp

pp = percentage points

Source: U.S. Department of Education, National Center for Education Statistics

- Voluntary reading rates diminish from childhood to late adolescence.

Percentage Who Read Almost Every Day for Fun

	1984	1999	2004
9-year-olds	53%	54%	54%
13-year-olds	35%	28%	30%
17-year-olds	31%	25%	22%

Source: U.S. Department of Education, National Center for Education Statistics

Percentage Who Read a Book the Previous Day (Outside School or Work)

	In 2004	
	For at least 5 minutes	For at least 30 minutes
8- to 10-year-olds	63%	40%
11- to 14-year-olds	44%	27%
15- to 18-year-olds	34%	26%

Source: The Henry J. Kaiser Family Foundation, *Generation M: Media in the Lives of 8-18 Year-Olds* (#7251), 2005

3. College attendance no longer guarantees active reading habits.

- Although reading tracks closely with education level, the percentage of college graduates who read literature has declined.

Percentage of Literary Readers Among College Graduates

1982	1992	2002	Change 1982–2002	Rate of decline 1982–2002
82%	75%	67%	-15 pp	-18%

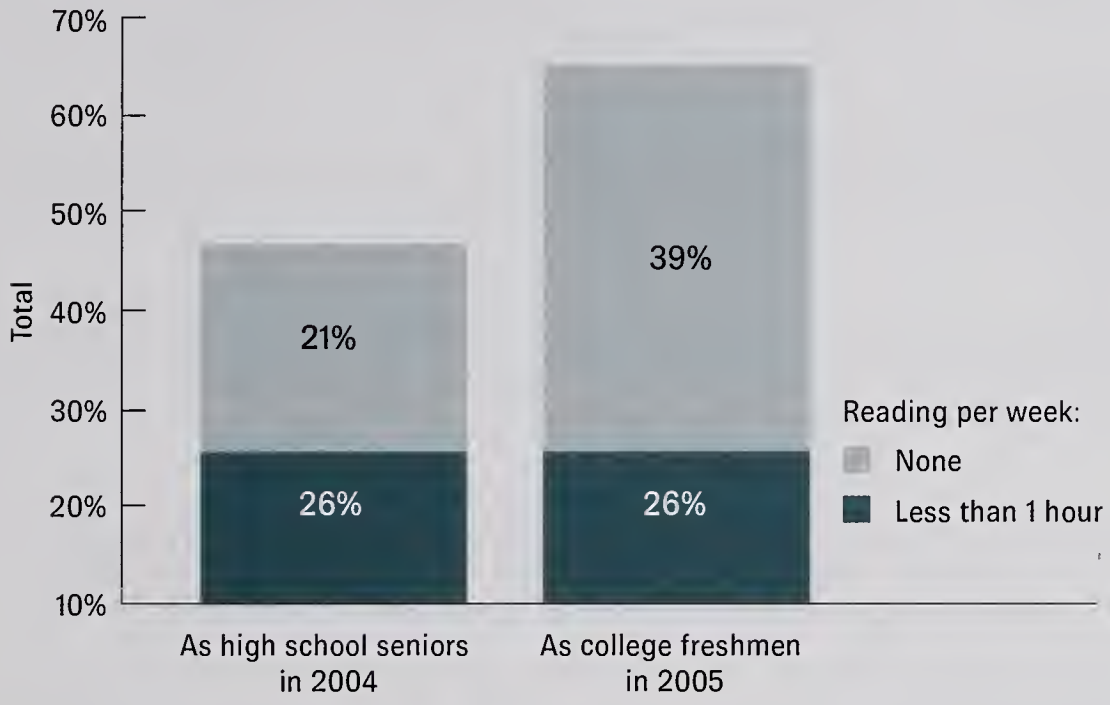
pp = percentage points

Source: National Endowment for the Arts

- 65% of college freshmen read for pleasure for less than an hour per week or not at all.
- The percentage of non-readers among these students has nearly doubled—climbing 18 points since they graduated from high school.

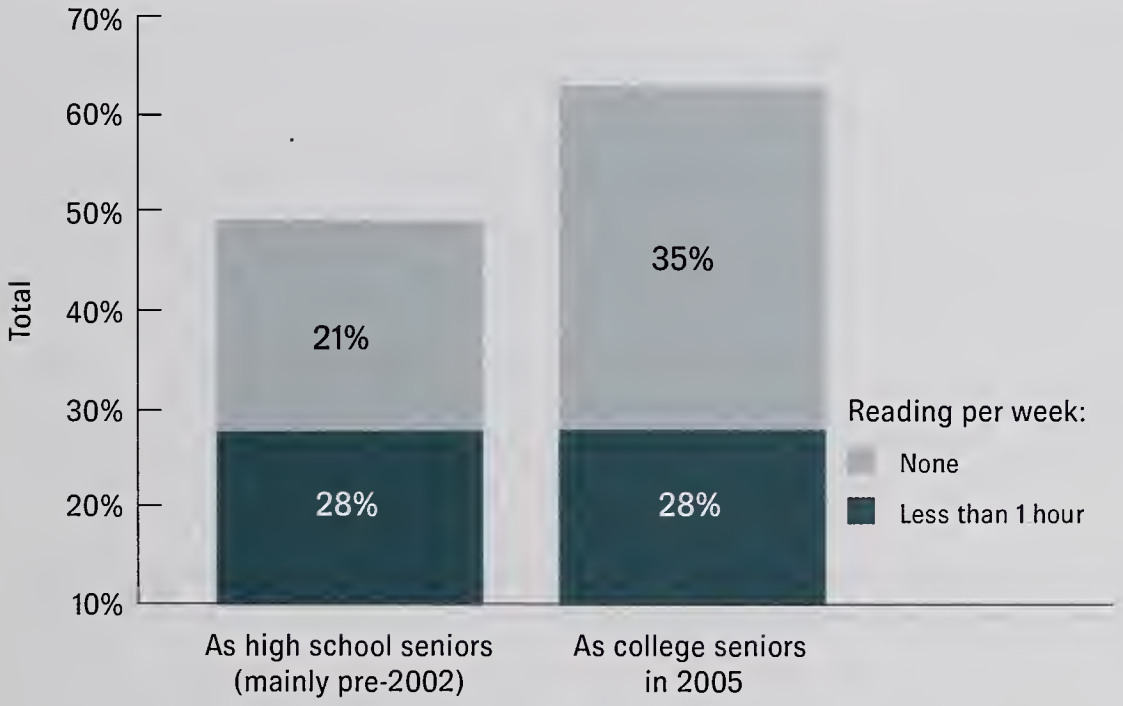
- By the time they become college seniors, one in three students read nothing at all for pleasure in a given week.

Percentage of U.S. College Freshmen Who Read Little or Nothing for Pleasure



Source: University of California, Los Angeles, Higher Education Research Institute

Percentage of U.S. College Seniors Who Read Little or Nothing for Pleasure



Source: University of California, Los Angeles, Higher Education Research Institute

4. Teens and young adults spend less time reading than people of other age groups.

- Americans between 15 and 34 years of age devote less leisure time than older age groups to reading anything at all.
- 15- to 24-year-olds spend only 7–10 minutes per day on voluntary reading—about 60% less time than the average American.

- By contrast, 15- to 24-year-olds spend 2 to 2½ hours per day watching TV. This activity consumes the most leisure time for men and women of all ages.

Average Time Spent Reading in 2006

	Hours/minutes spent reading	
	Weekdays	Weekends and holidays
Total, 15 years and over	:20	:26
15 to 24 years	:07	:10
25 to 34 years	:09	:11
35 to 44 years	:12	:16
45 to 54 years	:17	:24
55 to 64 years	:30	:39
65 years and over	:50	1:07

Source: U.S. Department of Labor, Bureau of Labor Statistics

- Literary reading declined significantly in a period of rising Internet use. From 1997–2003, home Internet use soared 53 percentage points among 18- to 24-year-olds. By another estimate, the percentage of 18- to 29-year-olds with a home broadband connection climbed 25 points from 2005 to 2007.[i]

Percentage of 18- to 24-Year-Olds Reading Literature

	1982	1992	2002
Percentage reading literature	60%	53%	43%
Change from 1982	#	-7 pp	-17 pp
Rate of decline from 1982	#	-12%	-28%

pp = percentage points
Source: National Endowment for the Arts

5. Even when reading does occur, it competes with other media. This multi-tasking suggests less focused engagement with a text.

- 58% of middle and high school students use other media while reading.
- Students report using media during 35% of their weekly reading time.
- 20% of their reading time is shared by TV-watching, video/computer game-playing, instant messaging, e-mailing or Web surfing.

Percentage Using Other Media While Reading
7th-12th Graders in 2003–2004

	% who use other media while reading
Most of the time	28%
Some of the time	30%
Most/some	58%
Little of the time	26%
Never	16%
Little/never	42%

Source: The Henry J. Kaiser Family Foundation, *Media Multitasking Among Youth: Prevalence, Predictors and Pairings* (# 7592), 2006

[i] U.S. Census Bureau, *Computer and Internet Use in the United States,* 1997 and 2003, and Pew/Internet & American Life Project, *Home Broadband Adoption 2007.*

ERRATA

On page 9 of the Executive Summary for *To Read or Not To Read*, the first sentence of the second bullet under #6 should state: "Amid year-to-year fluctuations, consumer book sales peaked at 1.6 **billion** units sold in 2000."

Percentage of Time Spent Reading While Using Other Media

7th- to 12th-Graders in 2003–2004

	Percentage of reading time
Reading while:	
Watching TV	11%
Listening to music	10%
Doing homework on the computer	3%
Playing videogames	3%
Playing computer games	2%
Using the computer (other)	2%
Instant messaging	2%
E-mailing	1%
Surfing websites	1%
Using any of the above media	35%

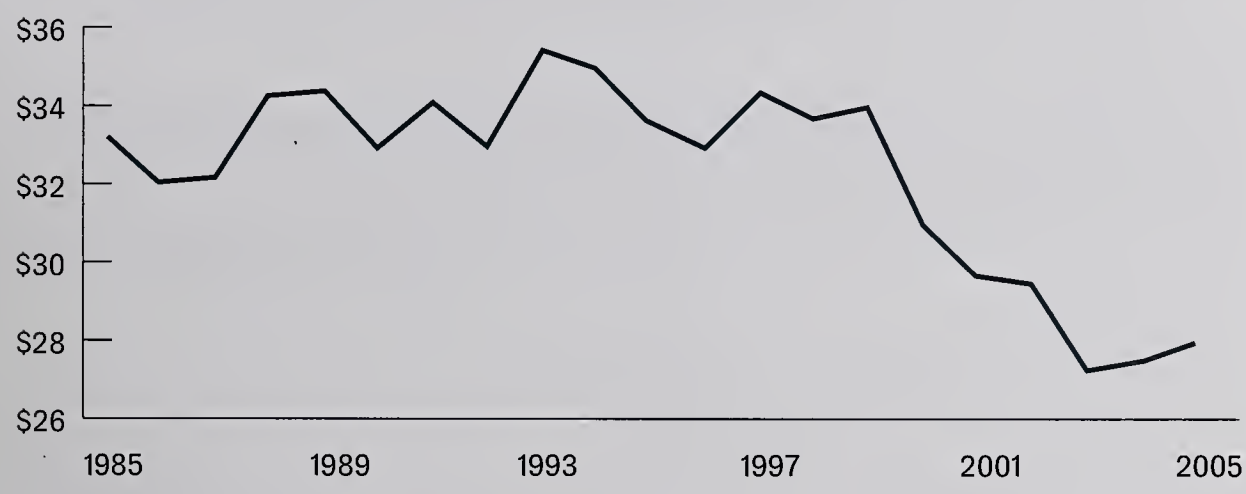
Source: The Henry J. Kaiser Family Foundation, *Media Multitasking Among Youth: Prevalence, Predictors and Pairings* (# 7592), 2006

6. American families are spending less on books than at almost any other time in the past two decades.

- Although nominal spending on books grew from 1985 to 2005, average annual household spending on books dropped 14% when adjusted for inflation.[ii]

Average Annual Spending on Books, by Consumer Unit

Adjusted for Inflation



The Consumer Price Index, 1982–1984 (less food and energy), was used to adjust for inflation.

Source: U.S. Department of Labor, Bureau of Labor Statistics

- Over the same period, spending on reading materials dipped 7 percentage points as a share of average household entertainment spending.
- Amid year-to-year fluctuations, consumer book sales peaked at 1.6 million units sold in 2000. From 2000 to 2006, however, they declined by 6%, or 100 million units.[iii]
- The number of books in a home is a significant predictor of academic achievement.

[ii] For the purpose of this analysis, "family" or "household" is used instead of the Bureau of Labor Statistics' technical term "consumer unit." In addition to families and households, a consumer unit may describe "a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent."

[iii] Albert N. Greco and Robert M. Wharton, *Book Industry TRENDS 2007* (New York, N.Y.: Book Industry Study Group, 2007), various pages.

Average Test Scores by Number of Household Books, Grade 12 (2005–2006)

Reported number of books at home	Average science score	Average civics score	Average history score*
More than 100	161	167	305
26–100	147	150	289
11–25	132	134	275
0–10	122	123	265

* Science and civics scores range from 0 to 300. History scores range from 0 to 500.

Source: U.S. Department of Education, National Center for Education Statistics

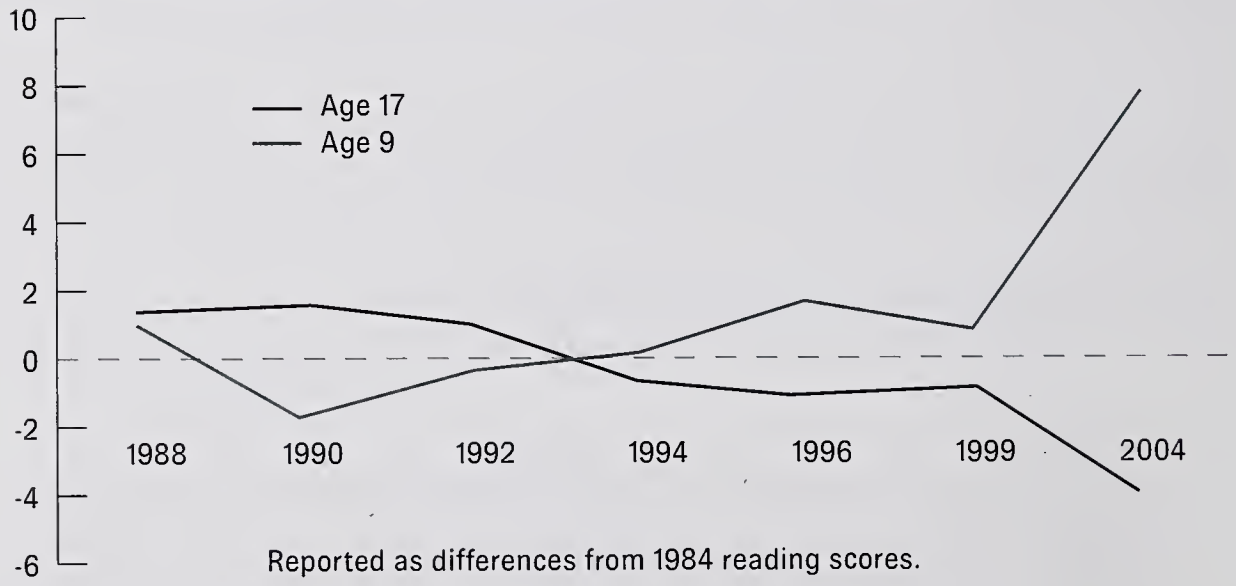
B. Americans Are Reading Less Well

As Americans read less, their reading skills worsen, especially among teenagers and young males. By contrast, the average reading score of 9-year-olds has improved.

1. Reading scores for 17-year-olds are down.

- 17-year-old average reading scores began a slow downward trend in 1992.
- For more than 30 years, this age group has failed to sustain improvements in reading scores.
- Reading test scores for 9-year-olds—who show no declines in voluntary reading—are at an all-time high.
- The disparity in reading skills improvement between 9-year-olds and 17-year-olds may reflect broader differences in the academic and social climate of those age groups.

Trend in Average Reading Scores for Students Ages 17 and 9



Test years occurred at irregular intervals.

Trend analysis based on data from the U.S. Department of Education, National Center for Education Statistics.

2. Among high school seniors, the average score has declined for virtually all levels of reading.

- Little more than one-third of high school seniors now read proficiently.[iv]

Percentage of 12th-Graders Reading at or Above the Proficient Level

1992	2005	Change	Rate of decline
40%	35%	-5 pp	-13%

pp = percentage points

Source: U.S. Department of Education, National Center for Education Statistics

- From 1992 to 2005, the average score declined for the bottom 90% of readers. Only for the very best readers of 2005, the score held steady.

Change in 12th-Grade Reading Scores, by Percentile: 1992 and 2005

Percentile	1992	2005	Change
90th	333	333	0
75th	315	313	-2
50th	294	288	-6
25th	271	262	-9
10th	249	235	-14

All score changes from 1992 are statistically significant.

Source: U.S. Department of Education, National Center for Education Statistics

- The reading gap is widening between males and females.

Average 12th-Grade Reading Scores by Gender

	1992	2005
Female	297	292
Male	287	279
Male-female gap	-10	-13

Source: U.S. Department of Education, National Center for Education Statistics

[iv] For 12th-graders, "Proficient" corresponds with a reading score of 302 or greater (out of 500).

3. Reading proficiency rates are stagnant or declining in adults of both genders and all education levels.

- The percentage of men who read at a Proficient level has declined. For women, the share of Proficient readers has stayed the same.[v]

Percentage of Adults Proficient in Reading Prose, by Gender

	1992	2003	Change	Rate of decline
Female	14%	14%	0 pp	0%
Male	16%	13%	-3 pp	-19%
Both genders	15%	13%	-2 pp	-13%

pp = percentage points

Source: U.S. Department of Education, National Center for Education Statistics

- Average reading scores have declined in adults of virtually all education levels.[vi]

Average Prose Literacy Scores of Adults, by Highest Level of Educational Attainment: 1992 and 2003

Education level:	1992	2003	Change
Less than/some high school	216	207	-9
High school graduate	268	262	-6
Vocational/trade/business school	278	268	-10
Some college	292	287	-5
Associate's/2-year degree	306	298	-8
Bachelor's degree	325	314	-11
Graduate study/degree	340	327	-13

Source: U.S. Department of Education, National Center for Education Statistics

- Even among college graduates, reading proficiency has declined at a 20%–23% rate.

Percentage of College Graduates Proficient in Reading Prose

	1992	2003	Change	Rate of decline
Bachelor's degree	40%	31%	-9 pp	-23%
Graduate study/degree	51%	41%	-10 pp	-20%

pp = percentage points

Source: U.S. Department of Education, National Center for Education Statistics

4. Reading for pleasure correlates strongly with academic achievement.

- Voluntary readers are better readers and writers than non-readers.
- Children and teenagers who read for pleasure on a daily or weekly basis score better on reading tests than infrequent readers.
- Frequent readers also score better on writing tests than non-readers or infrequent readers.

[v] For adults, "Proficient" corresponds with a prose literacy score of 340 or greater (out of 500).

[vi] Exceptions are adults still in high school and those with a GED or high school equivalency. In both cases, score changes from 1992 to 2003 were not statistically significant.

Average Reading Scores by Frequency of Reading for Fun

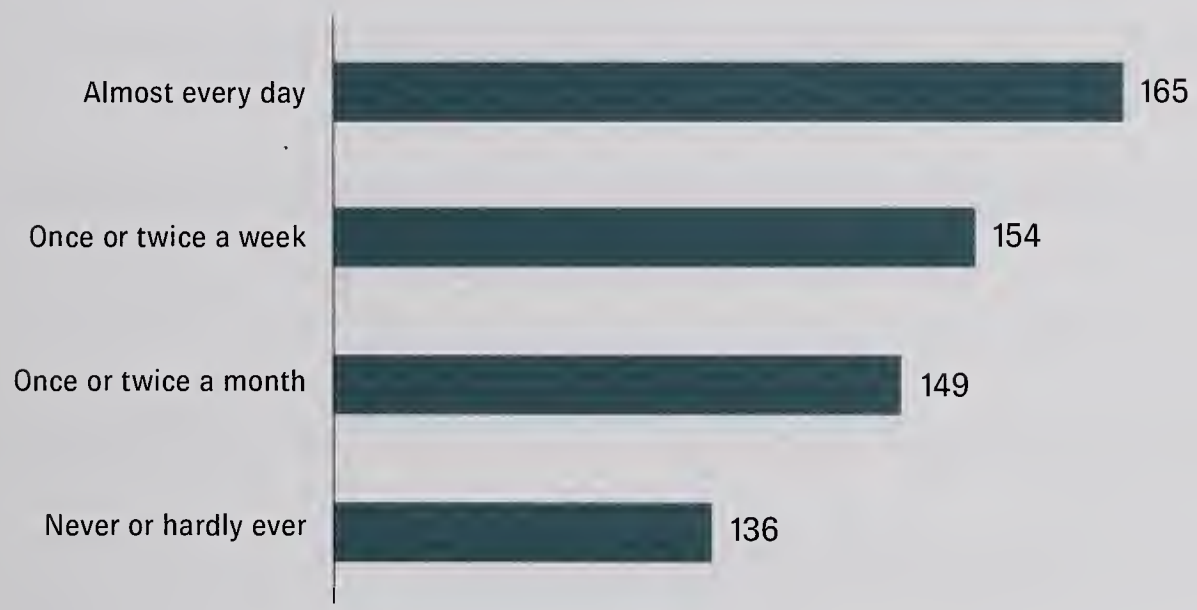
Grade 12 in 2005

Reading scores range from 0 to 500.

Source: U.S. Department of Education, National Center for Education Statistics

Average Writing Scores by Frequency of Reading for Fun

Grade 12 in 2002



Writing scores range from 0 to 300.

Source: U.S. Department of Education, National Center for Education Statistics

C. The Declines in Reading Have Civic, Social, and Economic Implications

Advanced readers accrue personal, professional, and social advantages. Deficient readers run higher risks of failure in all three areas.

1. Employers now rank reading and writing as top deficiencies in new hires.

- 38% of employers find high school graduates "deficient" in reading comprehension, while 63% rate this basic skill "very important."
- "Written communications" tops the list of applied skills found lacking in high school and college graduates alike.
- One in five U.S. workers read at a lower skill level than their job requires.[vii]
- Remedial writing courses are estimated to cost more than $3.1 billion for large corporate employers and $221 million for state employers.[viii]

Rated Very Important by Employers

Percentage of employers who rate the following basic skills as "very important" for high school graduates:

Reading comprehension	63%
English language	62%
Writing in English	49%
Mathematics	30%
Foreign languages	11%

Source: The Conference Board, *Are They Really Ready to Work?*, 2006

Percentage of Employers Who Rate High School Graduates as Deficient in Basic Skills

Writing in English	72%
Foreign languages	62%
Mathematics	54%
History/geography	46%
Government/economics	46%
Science	45%
Reading comprehension	38%
Humanities/arts	31%
English language	21%

Source: The Conference Board, *Are They Really Ready to Work?*, 2006

Percentage of Employers Who Rate Job Entrants as Deficient in Applied Skills

High school graduates deficient in:		College graduates deficient in:	
Written communication	81%	Written communication	28%
Leadership	73%	Leadership	24%
Professionalism/work ethic	70%	Professionalism/work ethic	19%
Critical thinking/problem solving	70%	Creativity/innovation	17%
Lifelong learning/self direction	58%	Lifelong learning/self-direction	14%

Source: The Conference Board, *Are They Really Ready to Work?*, 2006

[vii] Statistics Canada and OECD, *Learning a Living: First Results of the Adult Literacy and Life Skills Survey*, 2005, 145.

[viii] The National Commission on Writing, *Writing: A Ticket to Work...or a Ticket Out: A Survey of Business Leaders*, 2004, 29, and *Writing: A Powerful Message from State Government*, 2005, 32.

2. Good readers generally have more financially rewarding jobs.

- More than 60% of employed Proficient readers have jobs in management, or in the business, financial, professional, and related sectors.
- Only 18% of Basic readers are employed in those fields.
- Proficient readers are 2.5 times as likely as Basic readers to be earning $850 or more a week.

Percentage Employed in Management and Professional Occupations, by Reading Level in 2003

	Management, business and financial	Professional and related	Total in either job category
Proficient	19%	42%	61%
Basic	8%	10%	18%
Below Basic	3%	4%	7%

Source: U.S. Department of Education, National Center for Education Statistics

Percentage of Full-Time Workers by Weekly Earnings and Reading Level in 2003

	$850–$1,149	$1,150–$1,449	$1,450–$1,949	$1,950 or more	Total earning $850 or more
Proficient	20%	13%	13%	12%	58%
Basic	12%	5%	2%	4%	23%
Below Basic	7%	3%	1%	2%	13%

Source: U.S. Department of Education, National Center for Education Statistics

3. Less advanced readers report fewer opportunities for career growth.

- 38% of Basic readers said their reading level limited their job prospects.
- The percentage of Below-Basic readers who reported this experience was 1.8 times greater.
- Only 4% of Proficient readers reported this experience.

Percentage of Adults Who Said Their Reading Skills Limited Their Job Opportunities, by Reading Level in 2003

	A little	Some	A lot	Total
Proficient	2%	1%	1%	4%
Basic	14%	15%	9%	38%
Below Basic	13%	22%	35%	70%

Source: U.S. Department of Education, National Center for Education Statistics

4. Good readers play a crucial role in enriching our cultural and civic life.

- Literary readers are more than 3 times as likely as non-readers to visit museums, attend plays or concerts, and create artworks of their own.
- They are also more likely to play sports, attend sporting events, or do outdoor activities.
- 18- to 34-year-olds, whose reading rates are the lowest for any adult age group under 65, show declines in cultural and civic participation.[ix]

Participation Rates for Literary Readers in 2002

	Literary readers	Non-readers	Gap between groups
Visit art museums	43%	12%	-31 pp
Attend plays or musicals	36%	10%	-26 pp
Attend jazz or classical concerts	29%	9%	-20 pp
Create photographs, paintings, or writings	32%	10%	-22 pp
Attend sporting events	44%	27%	-17 pp
Play sports	38%	24%	-14 pp
Exercise	72%	40%	-32 pp
Do outdoor activities	41%	22%	-19 pp

pp = percentage points

Source: National Endowment for the Arts

5. Good readers make good citizens.

- Literary readers are more than twice as likely as non-readers to volunteer or do charity work.[x]

Percentage of Literary Readers Who Volunteered in 2002

Literary readers	Non-readers	Gap between groups
43%	16%	-27 pp

pp = percentage points

Source: National Endowment for the Arts

- Adults who read well are more likely to volunteer than Basic and Below-Basic readers.

Percentage of Adults Who Volunteered, by Reading Level in 2003

	Less than once a week	Once a week or more	Total who volunteered
Proficient	32%	25%	57%
Basic	16%	15%	31%
Below Basic	8%	10%	18%

Source: U.S. Department of Education, National Center for Education Statistics

[ix] National Endowment for the Arts, *The Arts and Civic Engagement: Involved in Arts, Involved in Life*, 2006.

[x] *Ibid.*

- 84% of Proficient readers voted in the 2000 presidential election, compared with 53% of Below-Basic readers.

Percentage of Adults Who Voted in the 2000 Presidential Election, by 2003 Reading Level

Proficient	84%
Basic	62%
Below Basic	53%

Source: U.S. Department of Education, National Center for Education Statistics

6. Deficient readers are far more likely than skilled readers to be high school dropouts.

- Half of America's Below-Basic readers failed to complete high school—a percentage gain of 5 points since 1992.
- One-third of readers at the Basic level dropped out of high school.

Percentage of Adults at or Below "Basic" Prose Reading Level Who Did Not Complete High School: 1992, 2003

Prose reading level					
Below Basic			Basic		
1992	2003	Change	1992	2003	Change
45%	50%	+5 pp	38%	33%	-5 pp

pp = percentage points

Source: U.S. Department of Education, National Center for Education Statistics

- For high school dropouts, the average reading score is 55 points lower than for high school graduates—and the gap has grown since 1992.
- This fact is especially troubling in light of recent estimates that only 70% of high school students earn a diploma on time.[xi]

Average Prose Reading Scores for Adult High School Graduates and Those Who Did Not Complete High School: 1992, 2003

	Prose reading score		
Highest level of education	1992	2003	Change
Less than/some high school	216	207	-9
High school graduate	268	262	-6
Gap between groups	-52	-55	

Source: U.S. Department of Education, National Center for Education Statistics

[xi] Editorial Projects in Education, *Diplomas Count 2007: Ready for What? Preparing Students for College, Careers, and Life after High School,* Executive Summary.

7. Deficient readers are more likely than skilled readers to be out of the workforce.

- More than half of Below-Basic readers are not in the workforce.
- 44% of Basic readers lack a full-time or part-time job—twice the percentage of Proficient readers in that category.

Percentage of Adults Employed Full-Time or Part-Time, by 2003 Reading Level

Proficient	78%
Basic	56%
Below Basic	45%

Source: U.S. Department of Education, National Center for Education Statistics

8. Poor reading skills are endemic in the prison population.

- 56% of adult prisoners read at or below the Basic level.
- Adult prisoners have an average prose reading score of 257—18 points lower than non-prisoners.
- Only 3% of adult prisoners read at a Proficient level.
- Low reading scores persist in prisoners nearing the end of their term, when they are expected to return to family, society, and a more productive life.[xii]

Percentage of Adult Prisoners and Household Populations by 2003 Reading Level

Prose reading level	Household	Prison	Gap
Below Basic	14%	16%	*+2 pp
Basic	29%	40%	+11 pp
Intermediate	44%	41%	*-3 pp
Proficient	13%	3%	-10 pp

* = not statistically significant

pp = percentage points

Source: U.S. Department of Education, National Center for Education Statistics

[xii] U.S. Department of Education, National Center for Education Statistics, *Literacy Behind Bars: Results from the 2003 National Assessment of Adult Literacy Prison Survey*, 2007, 77.

Conclusion

Self-reported data on individual behavioral patterns, combined with national test scores from the Department of Education and other sources, suggest three distinct trends: a historical decline in voluntary reading rates among teenagers and young adults; a gradual worsening of reading skills among older teens; and declining proficiency in adult readers.

The Department of Education's extensive data on voluntary reading patterns and prose reading scores yield a fourth observation: frequency of reading for pleasure correlates strongly with better test scores in reading and writing. Frequent readers are thus more likely than infrequent or non-readers to demonstrate academic achievement in those subjects.

From the diversity of data sources in this report, other themes emerge. Analyses of voluntary reading and reading ability, and the social characteristics of advanced and deficient readers, identify several discrepancies at a national level:

- Less reading for pleasure in late adolescence than in younger age groups
- Declines in reading test scores among 17-year-olds and high school seniors in contrast to younger age groups and lower grade levels
- Among high school seniors, a wider rift in the reading scores of advanced and deficient readers
- A male-female gap in reading proclivity and achievement levels
- A sharp divide in the reading skills of incarcerated adults versus non-prisoners
- Greater academic, professional, and civic benefits associated with high levels of leisure reading and reading comprehension

Longitudinal studies are needed to confirm and monitor the effects of these differences over time. Future research also could explore factors such as income, ethnicity, region, and race, and how they might alter the relationship between voluntary reading, reading test scores, and other outcomes. Critically, further studies should weigh the relative effectiveness and costs and benefits of programs to foster lifelong reading and skills development. For instance, such research could trace the effects of electronic media and "screen reading" on the development of readers in early childhood.

Recent studies of American time-use and consumer expenditure patterns highlight a series of choices lurking in the question "To read or not to read?" The future of reading rests on the daily decisions Americans will continue to make when confronted with an expanding menu of leisure goods and activities. The import of these national findings, however, is that reading frequently is a behavior to be cultivated with the same zeal as academic achievement, financial or job performance, and global competitiveness.

Technical Note

This report presents some of the most reliable and currently available statistics on American reading rates, literacy, and reader characteristics. No attempt has been made to explore methods for reading instruction, or to delve into racial, ethnic, or income traits of voluntary readers, though age, gender, and education are discussed at various points in the analyses. The majority of the data stem from large, nationally representative studies completed after the 2004 publication of the NEA's *Reading at Risk* report. Unless a footnote is provided, sources for all data in this Executive Sum-

mary are given with each accompanying chart or table. All adult reading scores and proficiency rates refer to the Department of Education's prose literacy category.

Caution should be used in comparing results from the several studies cited in this publication, as the studies use different methodologies, survey populations, response rates, and standard errors associated with the estimates, and the studies often were designed to serve different research aims. No definite causal relationship can be made between voluntary reading and reading proficiency, or between voluntary reading, reading proficiency, and the reader characteristics noted in the report. Finally, except where book reading or literary reading rates are specifically mentioned, all references to voluntary reading are intended to cover all types of reading materials.

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